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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventor: Andrew Scott Argersinger, et al.

Serial No: 10/709,973 Group Art No. 3737

Filed: June 10, 2004 Examiner: John Fernando Ramirez

For: MAMMOGRAPHY PATIENT CONTACT  
TEMPERATURE CONTROLLER

Attorney Docket No: GEMS 0242 PA / 15XZ6137 / 36214-18

I hereby certify that this correspondence is being deposited with the United States Patent Office via facsimile to 571-273-8300 on:

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**REQUEST FOR WITHDRAWAL OF ABANDONMENT**

Office of Petitions  
United States Patent Office  
Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA

This information is being submitted after Applicant has learned of abandonment of this application on the basis of a Notice of Abandonment mailed April 15, 2009. The abandonment was improper since the Applicants had timely filed a Brief on Appeal. Submitted herewith is a copy of the Brief on Appeal and postcard showing the USPTO receipt stamp dated November 3, 2008.

In view of the foregoing, it is respectfully submitted that the present application should not have been abandoned and that it should be returned to the active status for continued prosecution on the merits. Acknowledgment of the active status of this application is respectfully requested.

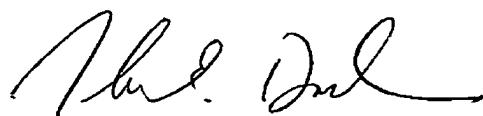
Serial No. 10/709,973

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The Commissioner is authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account No. 04-1061.

Respectfully submitted,



Thomas E. Donohue  
Registration No. 44,660  
38525 Woodward Avenue, Suite 2000  
Bloomfield Hills, MI 48304-5092  
(248) 433-7200

Attorney for Applicant

Date: May 12, 2009

Applicant(s): Andrew Srgersinger	Case No.: 36214-18
Application No.: 10/709,973	Filing Date: 6/10/2004
Title: <b>MAMMOGRAPHY PATIENT CONTACT TEMPERATURE CONTROLLER</b>	
<p>Please acknowledge receipt of:</p> <p> <input type="checkbox"/> Check \$ _____  <input type="checkbox"/> Request for Inter Partes Reexamination  <input type="checkbox"/> Missing Parts, Copy of Notification of Missing Parts  <input type="checkbox"/> Executed Declaration &amp; Power of Attorney  <input type="checkbox"/> Notice of Appeal <input checked="" type="checkbox"/> Appeal Brief  <input type="checkbox"/> Assignment &amp; Recordation <input type="checkbox"/> Sheet  <input type="checkbox"/> Information Disclosure Statement (PTO-1449)  <input type="checkbox"/> Patent Copies  <input type="checkbox"/> Extension of Time  <input type="checkbox"/> Certificate of Mailing  <input type="checkbox"/> Express Mail Label  <input type="checkbox"/> Make of Record  <input type="checkbox"/> Credit Card Payment Form  <input type="checkbox"/> Other Priority Document       </p>	
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USPTO Date Stamp	
Mailing Date: 10/29/2008	Attorney: TED/kh

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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CENTRAL FAX CENTER  
MAY 12 2009

In re Application of:

Andrew Scott Argersinger, et al.

Serial No.: 10/709,973

Group Art Unit: 3737

Filed: 6/10/2004

Examiner: John Fernando Ramirez

For: MAMMOGRAPHY PATIENT CONTACT TEMPERATURE CONTROLLER

Our Reference No: 15XZ6137 (GEMS 0242 PA) 36214-18

## CERTIFICATE OF MAILING/TRANSMISSION (37 CFR §1.8(a))

I hereby certify that this correspondence is, on the date shown below, being sent via U.S. Mail to Mail Stop Appeal Brief – Patents, Commissioner for Patents, Box 1450, Alexandria, VA 22313-1450 on.

10/29/08

Date

Karen A. Hopf

Karen A. Hopf

BRIEF ON APPEAL

Mail Stop Appeal Brief – Patents  
Commissioner for Patents  
Box 1450  
Alexandria, VA 22313-1450

Sir:

The following Appeal Brief is submitted pursuant to the Notice of Appeal filed on August 29, 2008.

The Commissioner is authorized to charge any necessary fee to Deposit Account No. 07-0845.

**I. Real Party in Interest**

The real party in interest in this matter is the General Electric Company.

**II. Related Appeals and Interferences**

There are no other known appeals or interferences which will directly affect or be directly affected by or have bearing on the Board's decision in the pending appeal.

**III. Status of the Claims**

Claims 1-4, 7-13 and 16-20 stand rejected in the Final Office Action dated May 29, 2007. Claims 5-6 and 14-15 have been cancelled from the case. A copy of the claims on appeal is attached as an Appendix.

**IV. Status of Amendments Filed After Final**

No Amendments were filed following the final rejection.

**V. Summary of Claimed Subject Matter**

The present invention is directed to a method and apparatus for a mammography imaging assembly wherein a thermo-generating element having a thermo sensor assembly controls the temperature of the patient exposure surface but that is automatically moved off the bucky prior to imaging such that non-radiolucent elements may be utilized. The Examiner has dismissed the novel claimed limitation on essentially the assertion that the present invention claims nothing more than automating what was previously done manually. This is incorrect and improperly minimizes multiple claimed limitations of the present invention. The present appeal will provide the Board with sufficient information by which to determine which position holds merit.

With reference to Figs. 1-5 and the description in paragraphs 18-29, Claim 1 recites a mammography imaging assembly 10 comprised of a gantry frame assembly 12 and an imaging signal generation assembly 14 mounted thereto (Fig 5, paragraph 18). An imaging detector bucky 16 is mounted to the frame assembly 12 and comprises a patient exposure surface 20 facing the imaging signal generation assembly 14 (Fig 5, paragraph 18). A thermo sensor

assembly 28 is positioned to monitor temperature at the patient exposure surface 20 (Fig 5, paragraph 19). A thermo generating element 26 is in communication with the patient exposure surface 20 (paragraph 19). A logic in communication with the thermo sensor assembly 28 and the thermo generating element 26 utilizes sensor data to control heat generated from the thermo generating element 26 to control the temperature at the patient exposure surface 20 (paragraph 19). A compression paddle 22 is positioned between the imaging signal generation assembly 14 and the imaging detector bucky 16 (paragraph 29). The thermo generating element 26 is a non-radiolucent element 64 (paragraph 29). The logic is adapted to automatically remove the non-radiolucent element 64 prior to activating the imaging signal generation assembly 14 (paragraph 29).

Independent claim 12 recites identical limitations to claim 1 as recited above, however, is broader in that the limitations regarding the compression paddle 22 have been removed.

Independent claim 18 recites a method of maintaining control of the temperature of a patient exposure surface 20 of a imaging detector bucky 16 as a portion of a mammography imaging assembly 10 (paragraphs 18, 19 and 29). The method includes monitoring the temperature of the patient exposure surface 20 (paragraph 18, Fig 5) using at least one thermo sensor assembly 28 positioned in communication with the surface 20. The temperature is reported to the logic that in turn controls the thermo generating element 26 in response, the thermo generating element 26 comprising a non-radiolucent element 64 (paragraph 29). The logic automatically removes the non-radiolucent element prior to activating the imaging signal generation assembly 14 (paragraphs 18-29).

## VI. Grounds of Rejection to be Reviewed on Appeal

The following issues are presented in this appeal:

A. Whether claims 1-4,8-13 and 17-20 are properly rejected under 35 USC 103(a) as being unpatentable over Klawitter et al. (US 5,081,657) in view of Wyatt (US 6,967,309).

## VII. Argument

### A. The Rejection of Claims 1-4,8-13 and 17-20 under 35 USC 103(a)

Claims 1-4,8-13 and 17-20 were rejected under 35 USC 103(a) as being unpatentable over Klawitter et al. (US 5,081,657) in view of Wyatt (US 6,967,309). The Applicant respectfully traverses and requests the Boards reconsideration.

The Examiner asserts that Klawitter discloses using heat conductive plates that are manually removed from the bucky table prior to imaging and that replacement of a manual operation with an automatic operation is a design consideration within the skill of the art. The Examiner further asserts that Wyatt teaches monitoring temperature at the patient exposure surface and control thereof and that the combination of Klawitter and Wyatt renders the present invention obvious.

The Applicant respectfully traverses this assertion and seeks the Boards reconsideration. The Wyatt reference utilizes sensors located at the patient exposure surface as the heating assembly is permanently integrated into the surface. The Klawitter reference teaches nothing more than a uniquely shaped heating pad as known in the art. The present invention, however, teaches an automatic assembly that maintains exact patient exposure surface temperature as is known in permanent assemblies while automatically removing the heating element prior to imaging so that low cost non-radiolucent materials may be utilized. This is not a mere automation of previously manual assemblies as asserted. The automation of the heater removal allows for precise contact surface temperature control benefits only previously available in permanent assemblies while allowing for the use of inexpensive non-radiolucent materials only available in manually removable systems without the capacity for precise surface temperature control. Since the design of Wyatt necessitates complete integration into the patient surface one skilled in the art could not combine such structure with Klawitter to arrive at the present invention. Reconsideration is therefore formally requested.

#### VIII. Appendix

A copy of each of the claims involved in this appeal, namely Claims 1-4, 7-13 and 16-20 are set forth and attached as Appendix A. Claims 5-6 and 14-15 have been cancelled from the case.

**IX. Conclusion**

For the foregoing reasons, Appellant respectfully requests that the Board direct the Examiner in charge of this examination to withdraw the rejections.

Please charge the fee for filing the Appeal Brief to Deposit Account 07-0845. Please credit any overpayment or charge any additional fees required in the filing of this appeal to deposit account 07-0845.

Respectfully submitted,



Thomas E. Donohue  
Registration No. 44,660  
Attorney for Appellant  
Dickinson Wright PLLC  
38525 Woodward Avenue, Suite 2000  
Bloomfield Hills, MI 48304-5092  
(248) 433-7200

Date: October 29, 2008

## APPENDIX A

1. (Rejected/Appealed) A mammography imaging assembly comprising:

a gantry frame assembly;

an imaging signal generation assembly mounted to said imaging frame;

an imaging detector bucky mounted to said imaging frame assembly, said imaging detector bucky comprising a patient exposure surface facing said imaging signal generation assembly;

at least one thermo sensor assembly positioned to monitor temperature at said patient exposure surface;

a thermo generating element in thermal communication with said patient exposure surface;

a logic in communication with said at least one thermo sensor assembly and said thermo generating element, said logic utilizing information from said at least one thermo sensor to control heat generated by said thermo generating element such that the temperature of said patient exposure side is controlled; and

a compression paddle movably positioned between said imaging signal generation assembly and said imaging detector bucky;

wherein said thermo generating element comprises a non-radiolucent element in communication with said imaging detector bucky; and

said logic is further adapted to automatically remove said non-radiolucent element prior to activating said imaging signal generation assembly.

2. (Rejected/Appealed) A mammography imaging assembly as described in claim 1 wherein said thermo generating element comprises a thermo electric element positioned within said imaging detector bucky.

3. (Rejected/Appealed) A mammography imaging assembly as described in claim 1 wherein said logic is in communication with said imaging signal generation assembly, said logic adapted to remove power from said thermo generating element prior to activating said imaging signal generation assembly.

4. (Rejected/Appealed) A mammography imaging assembly as described in claim 3 wherein said logic is further adapted to:

lower said compression paddle into thermal communication with said thermo generating element; and

raising said compression paddle prior to activating said imaging signal generation assembly.

5-6. (Cancelled)

7. (Rejected/Appealed) A mammography imaging assembly as described in claim 1 wherein said non-radiolucent element is removed in response to said compression paddle moving away from said imaging detector bucky.

8. (Rejected/Appealed) A mammography imaging assembly as described in claim 1 wherein said imaging detector bucky comprises an upper bucky surface defining an imaging region, said at least one thermo sensor assembly positioned outside said imaging region.

9. (Rejected/Appealed) A mammography imaging assembly as described in claim 1 wherein said thermo generating element comprise:

a heater array comprising a conductive polymer coating bonded to a film base, wherein said conductive polymer coating comprises carbon flakes suspended in a liquid polymer.

10. (Rejected/Appealed) A mammography imaging assembly as described in claim 1 wherein said thermo generating element comprise:

a heater array comprising a conductive polymer coating bonded to a film base and a protective film layer laminated to said film base.

11. (Rejected/Appealed) A mammography imaging assembly comprising:

an imaging frame assembly;  
a imaging signal generation assembly mounted to said imaging frame;  
an imaging detector bucky mounted to said imaging frame assembly, said imaging detector bucky comprising a patient exposure surface facing said imaging signal generation assembly;

at least one thermo sensor assembly positioned to monitor temperature at said patient exposure surface;

a thermo generating element in thermal communication with said patient exposure surface; and

a logic in communication with said at least one thermo sensor assembly and said thermo generating element, said logic utilizing information from said at least one thermo sensor to control heat generated by said thermo generating element such that the temperature of said patient exposure side is controlled, said logic in communication with

said imaging signal generation assembly, said logic adapted to remove power from said thermo generating element prior to activating said imaging signal generation assembly;

wherein said thermo generating element comprises a non-radiolucent element in communication with said imaging detector bucky; and

said logic is further adapted to automatically remove said non-radiolucent element prior to activating said imaging signal generation assembly.

12. (Rejected/Appealed) A mammography imaging assembly as described in claim 11 further comprising:

a compression paddle movably positioned between said imaging signal generation assembly and said imaging detector bucky.

13. (Rejected/Appealed) A mammography imaging assembly as described in claim 11 wherein said thermo generating element comprises a thermo electric element positioned within said imaging detector bucky.

14-15. (Cancelled)

16. (Rejected/Appealed) A mammography imaging assembly as described in claim 11 wherein said non-radiolucent element is rotated away from said imaging detector bucky prior to activation of said imaging signal generation assembly.

17. (Rejected/Appealed) A mammography imaging assembly as described in claim 11 wherein said thermo generating element comprise:

a heater array comprising a conductive polymer coating bonded to a film base, wherein said conductive polymer coating comprises carbon flakes suspended in a liquid polymer.

18. (Rejected/Appealed) A method of maintaining control of the temperature of a patient exposure surface on an imaging bucky detector as a portion of a mammography imaging assembly comprising:

monitoring the temperature of the patient exposure surface using at least one thermo sensor assembly positioned in communication with patient exposure surface;

reporting said temperature to a logic;

using said logic to control a thermo generating element in response to said temperature such that said temperature can be raised or lowered, said thermo generating element in thermal communication with said patient exposure surface, said thermo generating element comprising a non-radiolucent element in communication with said imaging detector bucky; and

using said logic to automatically remove said non-radiolucent element prior to activating said imaging signal generation assembly.

19. (Rejected/Appealed) A method as recited in claim 18 further comprising:

activating a imaging signal generation assembly using said logic; and cutting power to said thermo generating element prior to activating said imaging signal generation assembly.

20. (Rejected/Appealed) A method as recited in claim 18 further comprising:

activating a imaging signal generation assembly using said logic; moving a compression paddle into thermal communication with said patient exposure surface prior to use of said imaging signal generation assembly such that thermal energy is transferred from said patient exposure surface to said compression paddle; and

separating said compression paddle from said patient exposure surface prior to use of said imaging signal generation assembly.

**EVIDENCE APPENDIX**

The evidence provided in this appeal was put before the Examiner in the September 22, 2006, response to a non-final office action. It was done so under a signed and attested office action by Applicant's attorney. This evidence was considered, entered, and found non-persuasive by the Examiner in his February 9, 2007 Final Office Action. The September 22, 2006 response by the Applicant and the February 9, 2007 Final Office Action have been provided as evidence in this appendix pursuant to 37 CFR 41.37(c)(1)(ix) as Attachment 1 and Attachment 2.

**RELATED PROCEEDINGS APPENDIX**

**None.**